

Search Plan and Results

Question

[What is the relationship between breastfeeding and maternal weight change? \(DGAC 2010\)](#)

Date Searched

1/11/2010

Inclusion Criteria

- Systematic reviews/meta-analysis
- January 1990 to present
- Human subjects
- English language
- International
- *Sample size*: Minimum of 10 subjects per study arm; preference for larger sizes, if available
- Dropout rate: Less than 20%; preference for smaller dropout rates
- *Ages*: Adults 19 years and older
- *Populations*: Healthy, those with elevated chronic disease risk and those diagnosed with the highly prevalent chronic diseases (coronary heart disease/cardiovascular disease, hypertension, type 2 diabetes, osteoporosis, osteopenia and obesity).

Exclusion Criteria

- Primary research
- Medical treatment/therapy
- Diseased subjects
- Hospitalized patients
- Malnourished/third-world populations or disease incidence not relative to US population (e.g., malaria)
- Animal studies
- In vitro studies
- Articles not peer reviewed (websites, magazine articles, Federal reports, etc.).

Search Terms: Search Vocabulary

("Body Weight"[Mesh] OR "overweight"[Mesh] OR obesity[mh] OR adiposity[mh] OR "Body Mass Index"[mh] OR "Body Weights and Measures"[Mesh]) AND (breast feed* OR breastfed OR breast fed* OR breastfeed*) AND (systematic[sb] OR Meta-Analysis[ptyp]) Limits: Humans, English

Electronic Databases

Pubmed

Total hits from all electronic database searches: 143

Total articles identified to review from electronic databases: 20

Articles Identified Via Handsearch or Other Means

Articles identified via hand search: 1

Summary of Articles Identified to Review

Number of Primary Articles Identified: 0

Number of Review Articles Identified: 4

Total Number of Articles Identified: 4

Number of Articles Reviewed but Excluded: 17

List of Articles Included for Evidence Analysis

Dewey KG. [Impact of breastfeeding on maternal nutritional status](#). *Adv Exp Med Biol*. 2004; 554:591-100. Review. PMID: 15384569.

Fraser AB, Grimes DA. [Effect of lactation on maternal body weight: A systematic review](#). *Obstet Gynecol Surv*. 2003 Apr; 58 (4): 265-269. Review. PMID: 12665706.

Kramer MS, Kakuma R. [The optimal duration of exclusive breastfeeding: A systematic review](#). *Adv Exp Med Biol*. 2004; 554: 63-77. Review. PMID: 15384567. (Review also looked at breastfeeding and postpartum weight loss.)

Ip S, Chung M, Raman G, Chew P, Magula N, DeVine D, Trikalinos T, Lau J. [Breastfeeding and maternal and infant health outcomes in developed countries](#). *Evid Rep Technol Assess* (Full Rep). 2007 Apr; (153): 1-186. Review. PMID: 17764214.

List of Excluded Articles with Reason

Article	Reason for Exclusion
Adair LS. Methods appropriate for studying the relationship of breast-feeding to obesity. <i>J Nutr.</i> 2009 Feb; 139 (2): 408S-411S. Epub 2008 Dec 23. Review. PMID: 19106309.	Did not answer the research question; review looked at effect of breast-feeding against overweight in later life.
Akobeng AK, Heller RF. Assessing the population impact of low rates of breast feeding on asthma, coeliac disease and obesity: The use of a new statistical method. <i>Arch Dis Child.</i> 2007 Jun; 92 (6): 483-485. Epub 2006 Jul 13. Review. PMID: 16840504.	Did not answer the research question; review looked at the effect of low rates of breastfeeding on childhood asthma, celiac disease and obesity.
Amir LH, Donath S. A systematic review of maternal obesity and breastfeeding intention, initiation and duration. <i>BMC Pregnancy Childbirth.</i> 2007 Jul 4; 7:9. Review. PMID: 17608952; PMCID: PMC1937008.	Did not answer the research question; review focused on initiation/duration of breastfeeding among obese and normal weight women.
Amorim AR, Linne YM, Lourenco PM. Diet or exercise, or both, for weight reduction in women after childbirth. <i>Cochrane Database Syst Rev.</i> 2007 Jul 18; (3) :CD005627. Review. PMID: 17636810.	Did not answer the research question; review focused on diet and exercise for weight reduction. The review looked at breastfeeding women to be sure that breastfeeding was not compromised, but not breastfeeding related to weight change.
Arenz S, Rückerl R, Koletzko B, von Kries R. Breast-feeding and childhood obesity--a systematic review. <i>Int J Obes Relat Metab Disord.</i> 2004 Oct; 28 (10): 1, 247-1, 256. Review. PMID: 15314625.	Did not answer the research question; review focused on breastfeeding and childhood obesity.
Arenz S, Von Kries R. Protective effect of breast-feeding against obesity in childhood: Can a meta-analysis of published observational studies help to validate the hypothesis? <i>Adv Exp Med Biol.</i> 2009; 639:145-152. Review. No abstract available. PMID: 19227541.	Did not answer the research question; review focused on breastfeeding related to childhood obesity. Same citation as #7 although published in 2005 and with a different PubMed number.
Arenz S, von Kries R. Protective effect of breastfeeding against obesity in childhood. Can a meta-analysis of observational studies help to validate the hypothesis? <i>Adv Exp Med Biol.</i> 2005; 569:40-48. Review. PMID:	Did not answer the research question; review focused on breastfeeding related to childhood obesity.

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Butte NF. Impact of infant feeding practices on childhood obesity. <i>J Nutr.</i> 2009 Feb; 139 (2): 412S-416S. Epub 2008 Dec 23. PMID: 19106326.	Did not answer the research question; review focused on breastfeeding related to childhood obesity.
Campbell KJ, Hesketh KD. Strategies which aim to positively impact on weight, physical activity, diet and sedentary behaviours in children from zero to five years. A systematic review of the literature. <i>Obes Rev.</i> 2007 Jul; 8(4): 327-338. Review. PMID: 17578382.	Did not answer the research question; rearches excluded literature concerned with breastfeeding.
Cope MB, Allison DB. Critical review of the World Health Organization's (WHO) 2007 report on 'evidence of the long-term effects of breastfeeding: Systematic reviews and meta-analysis' with respect to obesity. <i>Obes Rev.</i> 2008 Nov; 9 (6): 594-605. Epub 2008 Jun 12. Review. PMID: 18554244.	Did not answer the research question; review does not address weight change in breastfeeding women; on implications on child.
Harder T, Bergmann R, Kallischnigg G, Plagemann A. Duration of breastfeeding and risk of overweight: a meta-analysis. <i>Am J Epidemiol.</i> 2005 Sep 1;162 (5): 397-403. Epub 2005 Aug 2. PMID: 16076830.	Did not answer the research question; review focused on duration of breastfeeding and risk of overweight in children.
Owen CG, Martin RM, Whincup PH, Davey-Smith G, Gillman MW, Cook DG. The effect of breastfeeding on mean body mass index throughout life: A quantitative review of published and unpublished observational evidence. <i>Am J Clin Nutr.</i> 2005 Dec; 82 (6): 1, 298-1, 307. Review. PMID: 16332664.	Did not answer the research question; the review focused on formula fed vs. breastfed infants related to obesity in later life; nothing on maternal weight.
Owen CG, Martin RM, Whincup PH, Smith GD, Cook DG. Effect of infant feeding on the risk of obesity across the life course: A quantitative review of published evidence. <i>Pediatrics.</i> 2005 May; 115 (5): 1, 367-1, 377. Review. PMID: 15867049.	Did not answer the research question; the review focused on breastfeeding related to prevalence of obesity in later life; not maternal weight change.
Quak SH, Furnes R, Lavine J, Baur LA; Obesity Working Group. Obesity in children and adolescents. <i>J Pediatr Gastroenterol Nutr.</i> 2008 Aug; 47 (2): 254-259. No abstract available. PMID: 18664884.	Did not answer the research question; review focused on obesity in children and adolescents.

<p>Sachs M, Dykes F, Carter B. Weight monitoring of breastfed babies in the United Kingdom: Interpreting, explaining and intervening. <i>Matern Child Nutr</i>. 2006 Jan; 2 (1): 3-18. Review. PMID: 16881910.</p>	<p>Study is a narrative review.</p>
<p>Sachs M, Dykes F, Carter B. Weight monitoring of breastfed babies in the UK - centile charts, scales and weighing frequency. <i>Matern Child Nutr</i>. 2005 Apr; 1 (2): 63-76. Review. PMID: 16881882.</p>	<p>Did not answer the research question; review focused on weight monitoring of breastfed babies; nothing on maternal weight change.</p>
<p>Viswanathan M, Siega-Riz AM, Moos MK, Deierlein A, Mumford S, Knaack J, Thieda P, Lux LJ, Lohr KN. Outcomes of maternal weight gain. <i>Evid Rep Technol Assess (Full Rep)</i>. 2008 May; (168): 1-223. Review. PMID: 18620471.</p>	<p>Did not answer the research question; review focused on weight monitoring of breastfed babies; nothing on maternal weight change.</p>